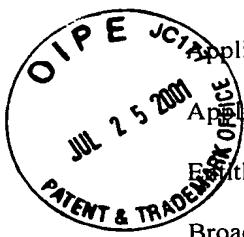


Appl. No. To be assigned
Docket No. 1875.0370000

Certificate Under 37 C.F.R. § 3.73(b)



Applicant/Patent Owner: Broadcom Corporation

Application No./Patent No.: To be assigned Filed/Issue Date: Herewith

Entitled: Die-Up Ball Grid Array Package With a Heat Spreader and Method for Making the Same

Broadcom Corporation, a corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

- the assignee of the entire right, title, and interest, or
- an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

A. An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: May 20, 2001

Name: William Ruehle

Title: Vice President & CFO

Signature: William Ruehle

Appl No: To be assigned
Docket No: 1875.0370000

POWER OF ATTORNEY FROM ASSIGNEE

Broadcom Corporation, a corporation of California, having a principal place of business at 16215 Alton Parkway, Irvine, CA 92618-3616, is assignee of the entire right, title and interest for the United States of America (as defined in 35 U.S.C. § 100), by reason of an Assignment to the Assignee executed on 1) 4/27/01
2) 4/27/01 of an invention known as Die-Up Ball Grid Array Package With a Heat Spreader and Method for Making the Same(Attorney Docket No.1875.0370000), which is disclosed and claimed in a patent application of the same title by the inventor(s) 1) Tonglong Zhang, and 2) Reza-ur Rahman Khan (said application filed herewith at the U.S. Patent and Trademark Office, having Application Number To be assigned).
RES
7/23/01

The Assignee hereby appoints the following U.S. attorneys to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith: Robert Greene Sterne, Esq., Reg. No. 28,912; Edward J. Kessler, Esq., Reg. No. 25,688; Jorge A. Goldstein, Esq., Reg. No. 29,021; David K.S. Cornwell, Esq., Reg. No. 31,944; Robert W. Esmond, Esq., Reg. No. 32,893; Tracy-Gene G. Durkin, Esq., Reg. No. 32,831; Michele A. Cimbala, Esq., Reg. No. 33,851; Michael B. Ray, Esq., Reg. No. 33,997; Robert E. Sokohl, Esq., Reg. No. 36,013; Eric K. Steffe, Esq., Reg. No. 36,688; Michael Q. Lee, Esq., Reg. No. 35,239; Steven R. Ludwig, Esq., Reg. No. 36,203; John M. Covert, Esq., Reg. No. 38,759; and Linda E. Alcorn, Esq., Reg. No. 39,588. The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 New York Avenue, N.W.
Suite 600
Washington, D.C. 20005-3934
U.S.A.

Direct phone calls to 202-371-2600.

FOR: Broadcom Corporation

SIGNATURE: 

BY: William Ruehle

TITLE: Vice President & CFO

DATE: May 20, 2001

**DO NOT FORWARD
TO ASSIGNMENT BRANCH
NOT FOR RECORDATION**

Appl. No: To be assigned
Docket No: 1875.0370000

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventor(s): 1)Tonglong Zhang, and 2) Reza-ur Rahman Khan, the undersigned inventor(s) hereby sell(s) and assign(s) to Broadcom Corporation (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

check applicable box(es) for the United States of America (as defined in 35 U.S.C. § 100),
 and throughout the world,

(a) in the invention(s) known as Die-Up Ball Grid Array Package With a Heat Spreader and Method for Making the Same for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 1) 4/27/01 2) 4/27/01 (also known as United States Application No. To be assigned, filed herewith), in any and all applications thereon, in any and all Letters Patent(s) therefor, and

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventor(s) hereby represent(s) that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventor(s) hereby grant(s) Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; David

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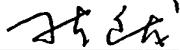
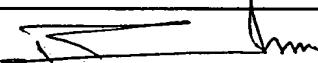
Send Correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 New York Avenue, N.W.
Suite 600
Washington, D.C. 20005-3934

Direct Telephone Calls to:

(202) 371-2600

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Tonglong Zhang	Date
Signature of sole or first inventor 	APRIL 27, 2001
Residence Singapore	
Citizenship Singapore	
Mailing Address BLK 665B Jurong West St. 64, #13-174, Singapore 642665	
Full name of second inventor Reza-ur Rahman Khan	
Signature of second inventor 	4/27/01
Residence Rancho Santa Margarita, CA	Date
Citizenship U.S.	
Mailing Address 36 Via Anadeja, Rancho Santa Margarita, CA 92688	

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